

SCR CONNECTIONs Audio Transcript

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Topic: ClinicalTrials.gov

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GOOD MORNING AGAIN EVERYONE.

THIS IS CHERYL.

WE'RE ABOUT TOP MINUTES AWAY FROM SCR CONNECTIONS THIS MORNING.

IF YOU WISH TO COMMUNICATE WITH US IF YOU'RE HAVING ANY ISSUES OR SOMETHING YOU NEED TO
TELL US PLEASE USE THE CHAT BOX.

WE ARE USING VOICE OVER I.P. THIS MORNING.

JUST STAND BY.

JUST STAND BY.

>> GOOD MORNING EVERYONE.

WE'RE WELCOMING YOU TO THIS MONTH'S EDITION OF SCR CONNECTIONS.

GOING TO PAUSE WHILE WE GET THE RECORDING STARTED.

I DO WANT TO REMIND THAT YOU TODAY'S SESSION WILL BE AVAILABLE FOR MLACE FOR ONE HOUR.

WE WILL HAVE QUESTIONS ABOUT TODAY'S PRESENTATION AT THE CONCLUSION OF OUR GUEST
SPEAKER'S PRESENTATION.

WE'RE GOING TO GET STARTED AND I WANTED TO LET EVERYONE KNOW THAT WE ARE EXTREMELY
HONORED TODAY TO HAVE WITH US AS A GUEST PRESENTER, DR. REBECCA WILLIAMS.

DR. WILLIAMS IS THE ASSISTANT DIRECTOR OF CLINICAL TRIALS.GOV AT THE NATIONAL LIBRARY OF
MEDICINES, NATIONAL INSTITUTES OF HEALTH IN BETHESDA AS THAT POSITION SHE IS RESPONSIBLE

FOR POLICY, REGULATORY AND OUTREACH ACTIVITIES RELATED TO THE DEVELOPMENT AND OPERATION OF THE CLINICAL TRIALS.GOV INTERNATIONAL CLINICAL RESEARCH REGISTRY AND RESULTS DATABASE.

DR. WILLIAMS RECEIVED HER DOCTOR OF PHARMACY FROM THE SCHOOL OF PHARMACY AT THE UNIVERSITY OF WISCONSIN IN MADISON.

AND THE M PH FROM THE BLOOMBERG SCHOOL OF PUBLIC HEALTH AT JOHNS HOPKINS UNIVERSITY.

AND WE WELCOME YOU, DR. WILLIAMS.

>> I HOPE THAT EVERYONE ELSE FINDS IT AS EQUALLY EXCITING.

MY GOAL IS REALLY TO FOCUS ON TODAY THE RESULTS DATABASE ASPECT OF CLINICAL TRIALS.GOV BECAUSE THAT IS THE NEWEST ADDITION AND I THINK THAT THERE'S JUST NOT AS MUCH AWARENESS ABOUT WHAT YOU CAN FIND THERE AND ALSO WHAT YOU CAN EXPECT TO NOT FIND THERE.

BEFORE I GO IN TO THE DETAILS OF WHAT WE DO ACTUALLY HAVE AVAILABLE IN THE DATABASE I THOUGHT IT WOULD BE USEFUL TO FIRST COVER SOME OF THE MOTIVATION BEHIND ESTABLISHING THIS DATABASE AS WELL AS TO COVER IN MORE DETAIL THE ACTUAL LEGISLATION THAT MANDATED THE DATABASE AND TO TALK ABOUT WHICH TYPES OF TRIALS THAT LEGISLATION COVERS.

SO, ONE OF THE ISSUES IN THE -- JUST NEED TO ADVANCE MY SLIDES.

A FEW OF THE ISSUES THAT HAVE BEEN IDENTIFIED WITH RESPECT TO CLINICAL TRIALS AND THEIR FIND THANKS ACTUALLY NOT ALL CLINICAL TRIALS ARE PUBLISHED.

AND EVEN WHEN THEY ARE PUBLISHED THOSE PUBLICATIONS DO NOT ALWAYS INCLUDE ALL OF THE PRESPECIFIED OUTCOME MEASURES.

AND UNACKNOWLEDGED CHANGES CAN BE MADE THAT WOULD ACTUALLY AFFECT THE INTERPRETATION OF THE FINDINGS.

SO JUST TO ILLUSTRATE WHY SOME OF THESE ISSUES ARE IMPORTANT WE'VE SEEN IN THE LITERATURE NUMEROUS STUDIES DOCUMENTING THIS PROBLEM OF WHAT PEOPLE COMMONLY REFER TO AS PUBLICATION BIAS IN WHICH THE PUBLISHED LITERATURE IS BIASED TOWARD THE RESULTS OF THOSE CLINICAL TRIALS THAT INVESTIGATORS WISH TO HAVE KNOWN AND AVAILABLE TO THE PUBLIC.

WHAT THIS PARTICULAR EVALUATION DID WAS ACTUALLY COMPARE DATA THAT FDA HAD AVAILABLE WHICH WASN'T AVAILABLE TO THE PUBLIC AT THE TIME AS WELL AS THE INFORMATION THAT WAS AVAILABLE IN THE PUBLISHED DOMAIN.

WHAT THEY FOUND WAS THAT THE INFORMATION THAT WAS IN THE PUBLISHED LITERATURE HAD A FAR HIGHER RATE OF POSITIVE FINDINGS THAN THE TRIALS THAT WERE HOUSED AT FDA AT THAT TIME.

BECAUSE THE RESULTS OF THESE TRIALS WHAT ARE ACTUALLY INFLUENCES PATIENT CARE, NOT HAVING ACCESS TO THE COMPLETE BODY OF EVIDENCE TO INFORM THOSE CARE DECISIONS IS PARTICULARLY PROBLEMATIC.

MANY PEOPLE HAVE ATTRIBUTED THIS PROBLEM OF PUBLICATION BIAS PRIMARILY TO RESEARCHERS IN INDUSTRY, THE PHARMACEUTICAL OR DEVICE INDUSTRY, PEOPLE TEND TO THINK THAT THIS PROBLEM IS ONE THAT IS RESTRICTED TO CORPORATE INTERESTS, I GUESS.

AND THIS STUDY WAS ACTUALLY DONE BY MY BOSS, DR. DEBRA ZAHREN AND OTHER COLLEAGUES THAT LOOKED AT THE RATE OF PUBLICATION OF NIH FUNDED TRIALS AND GENERALLY WHAT THEY FOUND WAS THAT THE RATE OF PUBLICATION REALLY WASN'T MUCH BETTER THAN WHAT WE HAD SEEN IN OTHER AREAS OF INDUSTRY.

AND EVEN COULD HAVE POSSIBLY BEEN WORSE.

THEIR EVALUATION DIDN'T LOOK AT THE FINDINGS THAT WERE PUBLISHED TO SEE IF THEY WERE POSITIVE OR NEGATIVE.

BUT THE KEY POINT WAS THAT FEWER THAN HALF OF THE STUDIES THAT THEY EVALUATED THAT HAD BEEN REGISTERED IN CLINICALTRIALS.GOV WERE NOT PUBLISHED WITHIN 30 MONTHS OF THE TRIAL COMPLETION.

THAT NUMBER GOT BETTER OVER TIME IF YOU LOOK FURTHER OUT FROM THE DATA COMPLETION OF THE STUDY BUT OVERALL THERE ARE STILL STUDIES THAT HAVE BEEN CONDUCTED THAT AREN'T NECESSARILY MAKING IT IN TO THE PUBLISHED LITERATURE.

AND ANOTHER ONE OF THE KEY ISSUES HAS BEEN RELATED TO ACTUALLY THE PRESPECIFIED OUTCOME MEASURES.

WHEN YOU CONDUCT A TRIAL YOU IDENTIFY AT THE BEGINNING WHICH OUTCOME MEASURES YOU WILL BE EVALUATING AND THE ENTIRE STUDY DESIGN IS BASED ON THOSE PARTICULAR OUTCOME MEASURES.

SO THIS WAS AN EXAMPLE THAT ACTUALLY WAS A MAJOR TIPPING POINT IN MOTIVATING THE JOURNAL EDITORS TO IMPLEMENT REQUIREMENTS FOR REGISTRATION AT THE BEGINNING OF THE TRIAL.

NOT EVEN FOCUSING ON THE RESULTS AT THIS POINT THINKING ABOUT CLINICAL TRIAL REGISTRATION AND I'LL EXPLAIN A LITTLE BIT WHY THEY WERE MOTIVATED TO DO SO.

WHAT YOU SEE ON THIS SLIDE IS AN EVALUATION, IT'S THE RESULTS OF THE COMPARISON OF THESE THREE DIFFERENT DRUGS.

CELECOXIB IS A NEW 2 DRUG.

THEY THOUGHT THAT PEOPLE WOULD HAVE FEWER ULCER COMPLICATIONS.

THEY DESIGNED A TRIAL TO EVALUATE WHETHER OR NOT THIS WAS ACTUALLY TRUE WHEN COMPARED TO OTHER ANTI-INFLAMMATORY MEDICATIONS.

SO WHEN YOU LOOK AT THE SLIDE WHAT YOU SEE IS THAT AT THE SIX-MONTH TIME POINT THE PERCENTAGE OF PEOPLE WHO ACTUALLY EXPERIENCED COMPLICATION WAS MUCH LOWER IN THE CELECOXIB GROUP.

THAT SEEMS ALL FINE AND DANDY THAT WAS PUBLISHED AT THE TIME THESE FINDINGS AT SIX MONTHS.

WELL, IT EVENTUALLY CAME OUT LATER THAT ACTUALLY THE PRESPECIFIED OUTCOME MEASURE WAS NOT AT THE SIX-MONTH TIME POINT BUT AT THE 12-MONTH TIME POINT.

WHEN YOU LOOK AT THE DATA GOING TOUT 12 MONTHS, YOU CAN SEE THAT THE FINDINGS ARE VERY DIFFERENT.

THAT ACTUALLY WHEN YOU LOOK AT THE THREE DIFFERENT PRODUCTS THEY ALL APPEAR TO ACTUALLY BE PRETTY SIMILAR IN THE RATE OF ULCER COMPLICATIONS.

SO WHAT WAS MOST PROBLEMATIC ABOUT THIS IS THAT THE JOURNAL EDITORS WHO PUBLISH THE THE INITIAL FINDING AT SIX MONTHS WERE NOT AWARE THAT THE PRESPECIFIED OUTCOME MEASURE WAS 12 MONTHS THEY WEREN'T AWARE THAT THE INVESTIGATORS WERE PUBLISHING THESE RESULTS ALREADY HAD THE 12-MONTH DATE THAT THEY KNEW THAT IT WAS BETTER THAN THE 12-MONTH DATA.

WHAT ENDED UP HAPPENING IS THAT THE JOURNAL EDITORS REALLY FELT THAT THEY HAD KIND OF BEEN DUPED IN THIS SITUATION, SO THEY TURNED TO TRIAL REGISTRATION AS A WAY OF DOCUMENTING THOSE OUTCOME MEASURES AT THE BEGINNING OF THE TRIAL SO THAT WOULD BE CLEARLY DOCUMENTED TO HELP POTENTIALLY AVOID PROBLEMS LIKE THIS THAT WOULD EVENTUALLY HAPPEN IN THE PUBLISHED LITERATURE.

SO, THAT WAS -- I'VE MENTIONED ONE OF MANY CONTROVERSIES UNFORTUNATELY ANY DAY THAT YOU PICK UP A PAPER OR OPEN YOUR WEB BROWSER YOU WILL SEE ADDITIONAL REPORTINGS OF CASES IN WHICH CLINICAL TRIAL RESULTS OR CLINICAL TRIALS IN GENERAL HAVE NOT BEEN MADE AVAILABLE TO THE PUBLIC IN A TIMELY MANNER.

SO ONE OF THE OBJECTIVES OF HAVING A CLINICAL TRIALS REGISTRY AND RIMS DATABASE TO TRY TO ADDRESS SOME OF THESE PROBLEMS.

REALLY PROBLEMS FIRST AND FOREMOST BECAUSE THESE ARE HUMAN VOLUNTEERS.

PEOPLE HAVE VOLUNTEERED THEIR TIME TO PARTICIPATE IN CLINICAL RESEARCH WITH THE CONCEPT THAT THE RESULTS FROM THESE CLINICAL TRIALS WILL HOPEFULLY EVENTUALLY HELP OTHER PEOPLE.

WE'RE NOT REALLY FULFILLING THAT PROMISE TO THE VOLUNTEERS IN THE RESEARCH IF THE RESEARCH ISN'T BEING DISSEMINATED IN THE PUBLIC DOMAIN.

SO OTHER REASONS ARE THAT I MENTIONED EARLIER IS REALLY TO SUPPORT THIS IDEA OF EVIDENCE-BASED MEDICINE IN THAT IF YOU HAVE ACCESS TO ALL OF THE TRIALS AND YOU HAVE ACCESS TO ALL OF THE RESULTS OF THE TRIALS HOPEFULLY WE'LL BE ABLE TO MAKE BETTER TREATMENT AND POLICY DECISIONS RELATED TO INDIVIDUAL PATIENT CARE.

SO WHEN PEOPLE TALK ABOUT TRANSPARENCY AND CLINICAL RESEARCH YOU REALLY THINK ABOUT A SPECTRUM.

AND THERE ARE DIFFERENT WAYS THAT YOU CAN ADDRESS TRANSPARENCY BUT I JUST WANTED TO REINFORCE WHAT WE'RE TALKING ABOUT AT CLINICALTRIALS.GOV DOCUMENTING THAT THE TRIAL EXISTS BEFORE THAT TRIAL IS INITIATED AND DOCUMENTING KEY PROTOCOL DETAILS LIKE THE ELIGIBILITY, BUT ALSO THOSE OUTCOME MEASURES THAT BECOME IMPORTANT FOR THE ANALYSIS LATER WHEN THE STUDY IS COMPLETE.

YOU COULD ALSO HAVE ACCESS TO THE FULL PROTOCOL.

THEN THE RESULTS DATABASE ADDRESSES SUMMARY LEVEL RESULTS.

I'LL GO IN TO A LITTLE BIT MORE DETAIL OF WHAT THAT IS AND WHAT IT INVOLVES AND WHAT IT LOOKS LIKE.

BUT IT'S NOT THE SAME LEVEL OF RESULTS DISCLOSURE AS SCIENTIFIC PUBLICATION BECAUSE PUBLICATION OFTEN HAS A LOT OF NARRATIVE, IT'S PUTTING THE RESULTS IN THE CONTEXT OF OTHER RESEARCH.

AND WHAT'S AVAILABLE AT CLINICALTRIALS.GOV IS TABLES OF INFORMATION.

WHAT'S BEEN DISCUSSED A LOT IN THE PAST YEAR IS WHETHER OR NOT THERE SHOULD BE GREATER ACCESS TO THE INDIVIDUAL PATIENT LEVEL DATA THAT WOULD ENABLE RESEARCHERS ALL OVER TO REUSE AND VALIDATE THE INFORMATION THAT'S ALREADY BEEN MADE AVAILABLE.

SO WHAT I'LL BE FOCUSING ON IS THE BLUE AND THE ORANGE ASPECTS OF TRANSPARENCY.

SO IT'S IMPORTANT TO ALSO UNDERSTAND THE CONTEX OF CLINICALTRIALS.GOV.

CLINICALTRIALS.GOV -- MANDATED THAT THIS BE MADE AVAILABLE.

AT THE TIME THE PRIMARY FOCUS WAS TO GIVE PATIENTS ACCESS TO INFORMATION ON CLINICAL TRIALS AND THESE ARE PATIENTS WHO HAD SERIOUS AND LIFE THREATENING DISEASES OR CONDITIONS WHO MAY NOT HAVE OTHERWISE HAD GOOD TREATMENT OPTIONS AVAILABLE JUST BY VISITING THEIR DOCTOR.

WE'RE REALLY PERHAPS ONLY TREATMENT OPTION AVAILABLE TO THEM MAY BE A CLINICAL TRIAL.

SO THAT WAS THE INITIAL MOTIVATION FOR MANDATING WAS TO GIVE PEOPLE ACCESS TO INFORMATION ON CLINICAL TRIALS FOR PARTICIPATION.

BUT THEN OVER TIME AS HEADLINES CONTINUED TO GROW THERE CONTINUED TO BE MORE CALLS FOR INCREASED TRANSPARENCY DATE FROM ALL SORTS OF DIFFERENT AVENUES.

TWO THAT ARE HIGHLIGHTED HERE, ICMJE, THEY WERE THE MOST INFLUENTIAL IN THE WORLD OF TRIAL REGISTRATION TO THEIR STATEMENT IN 2004 THAT SAID THAT THEY WILL NOT ACCEPT A TRIAL FOR PUBLICATION IN THEIR JOURNALS UNLESS THAT TRIAL IS REGISTERED AT THE OUT SET BEFORE PARTICIPANTS ARE ENROLLED.

THAT THAT STATEMENT REALLY HAD PROFOUND AFFECT IT REALLY DROVE TRIAL REGISTRATION AWARENESS.

SO, OVER TIME CLINICAL TRIALS HAS ADEPT TO ACCOMMODATE POLICIES SUCH AS THIS BECAUSE WE BELIEVE THAT THE MORE COMPREHENSIVE THE CLINICAL CLINICALTRIALS.GOV DATABASE IS MORE USEFUL TO ALL OF THE USERS OF THE DATABASE.

WHAT I'LL SPEND A LOT OF TIME FOCUSING ON TODAY IS THE LAST BULLET ON THIS SLIDE WHICH IS SECTION 801 OF FDAAA WHAT IS FOOD AND DRUG ADMINISTRATION AMENDMENTS ACTS.

THAT EXPANDED REGISTRATION REQUIREMENTS THAT WERE -- BUT ALSO ADDED A RESULTS REPORTING REQUIREMENT.

SO THAT WILL BE THE FOCUS OF MOSTLY THE REST OF THIS TALK.

BUT AS I SAID THE INTERNATIONAL COMMITTEE OF JOURNAL EDITORS POLICY HAD SIGNIFICANT IMPACT ON AWARENESS AND ACTUAL ACTIVITY IN THE CLINICAL TRIAL REGISTRATION SPACE.

AFTER WE IMPLEMENTED CLINICALTRIALS.GOV WE WERE GETTING ABOUT 25-30 TRIALS REGISTERED PER WEEK.

AFTER THE ICMJE POLICY WENT IN TO AFFECT WE STARTED GETTING 200-250 TRIALS PER WEEK.

THEN AFTER THE MOST RECENT PIECE OF LEGISLATION WAS PASSED IN 2007 WE'VE BEEN RECEIVING ANYWHERE BETWEEN 300-350 NEW TRIALS PER WEEK.

YOU CAN SEE THAT THE DATABASE IS CONSTANTLY CHANGING, SO YOU MAY LOOK ONE DAY AND NOT FIND WHAT YOU'RE LOOKING FOR MAY COME BACK THE NEXT DAY YOU MAY FIND WHAT YOU'RE LOOKING FOR.

IT IS A VERY DYNAMIC DATABASE IN TERMS OF THE NUMBER OF REGISTRATIONS THAT ARE COMING IN ON A WEEKLY BASIS.

THIS SLIDE IS INTENDED JUST TO ILLUSTRATE THE GENERAL TYPES OF STUDIES THAT WE HAVE AVAILABLE IN CLINICALTRIALS.GOV THERE'S CURRENTLY OVER 137,000 STUDIES IN THE REGISTRY.

AND 7600 OF THOSE HAVE RESULTS POSTED IN CLINICALTRIALS.GOV IN OUR TABULAR FORMAT WHICH I'LL TALK ABOUT IN MORE DETAIL.

WHAT PEOPLE OFTEN DON'T UNDERSTAND IS THAT CLINICALTRIALS.GOV ALSO INCLUDES OBSERVATIONNAL STUDIES.

THE WORD "TRIAL" LENDS YOU TO THINK THAT THERE IS ONLY TRIALS BUT THERE ARE ALSO OBSERVATIONNAL OR EPIDEMIOLOGICAL TYPE STUDIES REGISTERED IN CLINICALTRIALS.GOV AND YOU CAN SEE THAT MAKES UP ABOUT 18% OF THE DATABASE.

BUT MOST OF THOSE REGISTRATIONS ARE DONE ON A VOLUNTARY BASIS BECAUSE THERE ARE NOT CURRENTLY ANY POLICIES OR LAWS THAT REQUIRE THE REGISTRATION OF OBSERVATIONNAL STUDIES.

MOST OF THE STUDIES THAT ARE REGISTERED ARE THOSE OF DRUGS OR BIOLOGICS OR DEVICES I THINK ACTUALLY PART OF THE SLIDE GOT CUT OFF WE'LL TRY TO GET THAT FIXED AFTERWARDS.

YOU CAN SEE THAT THE STUDIES COME FROM ALL AROUND THE WORLD.

ONLY 41% OF THE STUDIES ARE CONDUCTED SOLELY IN THE U.S. WHERE AS 4% OF THE STUDIES ARE CONDUCTED ENTIRELY OUTSIDE OF THE U.S. THAT'S BECAUSE MANY OTHER COUNTRIES SUPPORT THE USE OF CLINICALTRIALS.GOV.

ISRAEL REQUIRES THE USE OF CLINICALTRIALS.GOV TO REGISTER STUDIES.

BUT BECAUSE THE INTERNATIONAL COMMITTEE MEDICAL JOURNAL EDITOR'S POLICY IS GLOBAL THERE ARE PEOPLE FROM ALL AROUND THE WORLD WHO USE CLINICALTRIALS.GOV TO COMPLY WITH THE JOURNAL EDITORS' POLICY.

WE HAVE A VERY BROAD RANGE OF USERS AT CLINICALTRIALS.GOV WHICH IS A BIT OF A CHALLENGE IN TERMS OF COMMUNICATING INFORMATION THAT MEETS ALL OF THE DIFFERENT AUDIENCES' NEEDS.

THIS INFORMATION HERE WAS COLLECTED FROM SURVEY THAT WE RUN ONLINE ON THE WEBSITE.

IT IS SAMPLING OF ONLY THOSE PEOPLE WHO CHOSE TO RESPOND TO THE SURVEY BUT YOU CAN SEE THAT IT'S VERY MIXED IN TERMS OF THE DIFFERENT PEOPLE WHO ARE ACCESSING CLINICALTRIALS.GOV BUT THE MAJORITY OF PEOPLE FALL IN TO THIS CATEGORY OF PATIENTS OR FRIENDS OF PATIENTS WHO MAY BE LOOKING FOR CLINICAL TRIALS TO MEET THEIR OWN INDIVIDUAL NEEDS.

YOU CAN SEE VERY LAST LINE, LIBRARIANS ARE THE 1% MARK NOW WHETHER THAT'S ACTUALLY REPRESENTATIVE OF OVERALL USERS IT'S HARD TO KNOW.

I JUST WANTED TO PROVIDE A LITTLE BIT MORE DETAIL ABOUT THE ICMJE POLICY TO MAKE SURE THAT THAT WAS CLEAR.

ICMJE REQUIRES THAT ANY CLINICAL TRIAL BE REGISTERED PRIOR TO THE FIRST PARTICIPANT BEING ENROLLED IN ORDER FOR THAT TRIAL TO BE ELIGIBLE FOR PUBLICATION IN ONE OF THEIR JOURNALS.

SO IT'S ANY CLINICAL TRIAL, ALL PHASES ANY INTERVENTION TYPES.

THEY HAVE SPECIFIED -- I GUESS ENDORSED THE W.H.O. DATA REGISTRATION SET WHICH SPECIFIES, MINIMUM OF 20 ITEMS THAT MUST BE COMPLETED IN ORDER TO FULFILL THEIR REQUIREMENTS.

AND THEY WILL ACCEPT REGISTRATIONS AT CLINICALTRIALS.GOV OR OTHER REGISTRIES THAT ARE DEEMED BY W.H.O. TO BE A PRIMARY REGISTRY.

CLINICALTRIALS.GOV ISN'T THE ONLY REGISTRY BUT WE ARE THE BIGGEST REGISTRY.

SO THE NEXT FEW SET OF SLIDES ARE INTENDED TO FOCUS ON THE FDAAA ONLY REASON I'M INCLUDING WHAT MAY APPEAR TO BE A LOT OF LEGAL INFORMATION IS JUST MAKE IT CLEAR THAT WHAT THE REQUIREMENTS ARE SO YOU CAN UNDERSTAND WHAT IS EXPECTED TO BE THERE BASED ON THE LAW.

THE LAW REQUIRES THAT RESPONSIBLE PARTY REGISTER WHAT IS CALLED AN APPLICABLE CLINICAL TRIAL.

I'LL SHOW YOU THE DEFINITION OF THAT ON THE NEXT PAGE.

NO LATER THAN 21 DAYS AFTER ENROLLMENT OF THE FIRST PARTICIPANT.

YOU CAN SEE THAT THAT TIMING IS A LITTLE BIT DIFFERENT THAN THE JOURNAL EDITOR'S POLICY.

THEN THE LAW ALSO REQUIRES THAT THAT TRIAL SUBMIT SUMMARY RESULTS INFORMATION NOT LATER THAN ONE YEAR AFTER THE TRIAL'S COMPLETION DATE.

THERE ARE SOME CIRCUMSTANCES WHICH RESULTS REPORTING MAY BE DELAYED BUT I'M NOT GOING IN TO THAT IN GREAT DETAIL.

SO IN TERMS OF THE SCOPE THIS TERM APPLICABLE CLINICAL TRIALS, IS ANY CLINICAL TRIAL OF A DRUG, BIOLOGIC OR DEVICE, IT'S LIMITED TO DRUG BIOLOGIC AND DEVICES THAT'S WHERE FDA HAS REGULATORY AUTHORITY THAT'S ONE OF THE KEY COMPONENTS OF THIS LAW.

IT DOES EXCLUDE PHASE ONE STUDIES AND IT DOES EXCLUDE SMALL FEASIBILITY STUDIES.

IT IS THOSE STUDIES IN WHICH FDA HAS JURISDICTION SO ESSENTIALLY IF THEY'RE USING A PRODUCT THAT IS REGULATED BY FDA THERE'S SITE WITHIN THE UNITED STATES THEN IT WILL LIKELY FALL UNDER THIS DEFINITION OF APPLICABLE CLINICAL TRIAL.

BECAUSE THE LAW WAS PASSED IN SEPTEMBER 2007 THERE WAS IMPLEMENTATION DEADLINE IN TERMS OF, IT'S ONLY THOSE TRIALS THAT MEET THIS DEFINITION THAT WERE ONGOING AS OF CERTAIN DATE OR INITIATED AFTER THE LAW WAS PASSED.

THIS IS JUST MAINLY FOR YOUR REFERENCE, IT'S ANOTHER BREAK DOWN OF THE REQUIREMENTS FOR POTENTIAL APPLICABLE CLINICAL TRIALS.

I DON'T KNOW IF IN YOUR WORK AT ALL YOU WOULD EVER GET QUESTIONS ABOUT WHETHER OR NOT A CLINICAL TRIAL IS REQUIRED TO BE REGISTERED BUT THIS IS A USEFUL TOOL FOR HELPING TO TRY AND FIGURE THAT OUT A LITTLE BIT.

THIS IS POSTED ON OUR WEBSITE.

THE LAW ALSO SPECIFIES EXACTLY WHO IT IS THAT MUST REGISTER, THE RESPONSIBLE PARTY, THERE IS SPECIFIC DEFINITIONS RELATED TO THAT THEN THE TRIALS AS I MENTIONED MUST BE REGISTERED NO LATER THAN 21 DAYS AFTER ENROLLMENT.

SO RESULTS REPORTING REQUIREMENTS THEN COVER THAT SAME SCOPE OF TRIALS.

THOSE TRIALS THAT ARE DEEMED APPLICABLE CLINICAL TRIALS.

BUT RIGHT NOW THE WAY THAT THE LAW IS WORDED TO THAT RESULTS REPORTING IS LIMITED TO KNOWS CLINICAL TRIALS THAT ARE OF APPROVED OR CLEARED DRUGS BIOLOGICS OR DEVICES.

THOSE PRODUCTS THAT ARE ACTUALLY MARKETED RATHER THAN INVESTIGATIONAL PRODUCTS.

SO IF THE TRIAL INCLUDED AN UNAPPROVED PRODUCT AT THE TIME THAT IT COMPLETED RIGHT NOW THOSE TRIALS ARE NOT REQUIRED TO REPORT RESULTS TO CLINICAL TRIALS.

WE ARE WRITING REGULATIONS TO IMPLEMENT SOME OF THE TRIALS, ONE OF THE THINGS THAT WE WERE ASKED TO CONSIDER WHETHER OR NOT THE RESULTS REPORTING REQUIREMENT SHOULD BE EXPANDED TO INCLUDE UNAPPROVED PRODUCTS AS WELL.

I THINK PART THAT HAVE MOTIVATION IS REALLY THINKING ABOUT, WHAT ARE THE GOALS OF REGISTRATION AND RESULTS REPORTING, MORE INFORMATION WILL BE AVAILABLE ON THAT IN THE FUTURE WHEN THOSE REGULATIONS ARE ISSUED.

THERE ARE SPECIFIC TIMELINES WHEN RESULTS MUST BE SUBMITTED.

GENERALLY IT'S WITHIN 12 MONTHS OF COMPLETION OF THE CLINICAL TRIAL.

WHAT ARE THE RESULTS REQUIREMENTS, WHAT INFORMATION IS IT THAT MUST BE SUBMITTED TO CLIP CLINICALTRIALS.GOV THE LAW DEFINED FOUR SCIENTIFIC AREAS THAT MUST BE COVERED WHEN SUBMITTING RESULTS.

PARTICIPANT FLOW, BASELINE CHARACTERISTICS, PRIMARY AND SECONDARY OUTCOME MEASURES AND ADVERSE INFORMATION.

I'LL GO IN TO A LITTLE BIT MORE DETAIL WHAT EACH OF THESE INCLUDES AND WHAT IT LOOKS LIKE.

THE OTHER KEY THING THAT FDAAA 'DOCTORED WAS ENFORCEMENT.

WHEN THE FIRST LAW WAS PASSED IT DIDN'T REQUIRE CLEAR ENFORCEMENT PROVISIONS.

BUT FDAA DOES.

IT GIVES FDA ISSUE TO ISSUE NOTICES OF NONCOMPLIANCE, THERE CAN BE CIVIL MONETARY PENALTIES GIVEN AS WELL AS POTENTIAL WITHHOLDING OF AN NIH GRANT FUND.

INCENTIVES TO COMPLY WITH THE LAW BASED ON THESE POTENTIAL ENFORCEMENT PROVISIONS IS PRETTY STRONG.

SO THERE'S A LOT OF QUESTIONS ABOUT THE RELATIONSHIP OF THE RESULTS REPORTING REQUIREMENTS UNDER FDAAA AND ITS RELATIONSHIP TO PUBLICATION AS WELL AS JUST, WHAT IS IT IN GENERAL.

SO SUMMARY RESULTS AT THE END OF THE TRIAL, THIS ISN'T IN TERM OR -- INTERIM OR REALTIME REPORTING THAT IS NOT WHAT THE LAW REQUIRED THAT'S NOT WHAT WE'RE SET UP TO DO.

IT'S SYSTEM RERESULTS AT THE END OF THE TRIAL AND IT DOES NOT INCLUDE PARTICIPANT-LEVEL DATA.

THE ROLLED UP INFORMATION OF ALL THE PARTICIPANTS REPORTED PER ARM.

THE INFORMATION RIGHT NOW REALLY CURRENTLY TARGETED AT READERS OF THE MEDICAL LITERATURE.

THE INFORMATION IS AVAILABLE TO THE PUBLIC, OF COURSE, FOR REUSE AND DISSEMINATION AND EVALUATION.

THE WAY THAT THE LAW WAS WORDED REQUIRED JUST THESE TABLES OF INFORMATION THAT LEAVES YOU WITH JUST THE FACTS OF THE TRIAL.

SO THERE'S NOT A LOT OF ROOM FOR NARRATIVE CONCLUSIONS OR DISCUSSION, NONE THAT HAVE REALLY APPEARS IN CLINICALTRIALS.GOV.

WHEN YOU'RE LIMITED THE AUDIENCE IS MOST LIKELY TO BE READERS OF THE MEDICAL LITERATURE IN TERMS OF WHO THAT IS GOING TO BE MOST NATURALLY INFORMATIVE TO.

SO YOU CAN SEE THAT THERE'S WHOLE SPECTRUM OF PEOPLE WHO WILL EVENTUALLY ACCESS THE RESULTS DATABASE.

BUT IN TERMS OF WHAT THE INFORMATION AS IT'S CURRENTLY ENTERED AND WHAT WE EXPECT AS MINIMUM THAT YOU'RE NOT WRITING THESE RESULTS FOR YOUR OWN CLINICAL RESEARCH TEAM.

WE EXPECT THE INFORMATION TO BE PRESENTED IN A WAY THAT ANOTHER READER OF THE LITERATURE WOULD BE ABLE TO COMPREHEND IT.

BECAUSE I'VE PRESENTED THE ICMJE REQUIREMENTS THERE ARE OFTEN QUESTIONS ABOUT THE RELATIONSHIP BETWEEN THE RESULTS DATABASE AND PUBLICATION IN THE MEDICAL LITERATURE.

ONE KEY POINT IS THAT DEADLINES FOR REPORTING TO CLINICALTRIALS.GOV ARE INDEPENDENT OF PUBLICATION STATUS MEANING THAT EVEN IF YOU ALREADY PUBLISHED YOUR RIMS YOU ARE STILL

REQUIRED TO SUBMIT THE DATA TO CLINICALTRIALS.GOV IN THE TABULAR FORMAT REQUIRED BY THE LAW.

OPPOSITE OF THAT, IF YOU ARE WORKING ON GETTING A PUBLICATION SUBMITTED THAT THAT IS NOT A SUFFICIENT REASON TO NOT SUBMIT RESULTS TO CLINICALTRIALS.GOV IF YOU ARE WAITING FOR THAT TO BE APPROVED BY A JOURNAL FOR PUBLICATION, THE LAW IS VERY CLEAR ABOUT THE DEADLINES IN WHICH INFORMATION MUST BE REPORTED.

THERE WERE SOME CONCERNS INITIALLY ABOUT IF RESULTS WERE SUBMITTED TO CLINICALTRIALS.GOV WOULD THAT INTERFERE WITH PUBLICATION BECAUSE IF THE RESULTS HAD BEEN PUBLISHED ELSEWHERE JOURNALS GENERALLY WILL NOT ACCEPT THAT FOR REPUBLICATION IN THEIR OWN JOURNAL.

BUT THE ICMJE VERY CLEARLY CAME OUT WITH FAQ ABOUT THIS TOPIC AS WELL AS EDITORIAL INDICATING THAT SUBMITTING TO -- RESULTS TO CLINICALTRIALS.GOV INTERFERE WITH THE ABILITY TO PUBLISH IN THEIR MEMBER JOURNALS.

BUT THE KEY THING TO REMEMBER IS THAT FAILING TO REGISTER THAT TRIAL BEFORE THE FIRST PARTICIPANT IS ENROLLED WILL DEFINITELY INTERFERE WITH PUBLICATIONS.

VERY IMPORTANT TO GET THAT TRIAL REGISTERED BEFORE IT STARTED.

THEN WE TRIED TO LINK THE INFORMATION IN CLINICALTRIALS.GOV TO THE PUBLICATIONS THAT DO EXIST IN LITERATURE TO PROVIDE MORE INTEGRATED REVERSE FOR UNDERSTANDING THE RESULTS OF A PARTICULAR TRIAL THAT WAS REGISTERED.

THIS IS JUST A SCREEN SHOT, THIS WAS ACTUALLY AN OLD VIEW OF THE STUDY RECORD BUT YOU CAN SEE AT THE BOTTOM OF THE STUDY RECORD WE HAVE LINKS TO PUBLICATIONS.

THESE LINKS TO PUBLICATIONS ARE IDENTIFIED BASED ON THE NCT NUMBER WHICH IS CLINICALTRIALS.GOV IDENTIFIER NUMBER.

WHEN THE NCT NUMBER IS INCLUDED IN THE PUBLICATION THAT NUMBER GETS INDEXED BY MEDLINE SO BY CRAWLING MEDLINE WE CAN PICK UP THAT NCT NUMBER AND ESTABLISH A LINK TO PUBMED THEN THAT WILL EVENTUALLY GET YOU TO THE JOURNAL ARTICLE.

MANY JOURNALS DO NOW INCLUDE LINK BACK TO CLINICALTRIALS.GOV IF YOU ARE LOOKING AT THE ONLINE VERSION OF THE JOURNAL YOU CAN CLICK ON THAT NCT NUMBER YOU CAN GET BACK TO THE ACTUAL REGISTRATION INFORMATION ON OUR WEBSITE.

I DID ALLUDE TO THIS RULE MAKING PROCESS AFTER THE LAW WAS PASSED THERE WERE A NUMBER OF UNANSWERED QUESTIONS IN TERMS OF WHAT WOULD BE BEST FOR IMPLEMENTATION.

AS PART OF THIS RULE MAKING PROCESS WE HAVE TO ADDRESS SOME OF THESE QUESTIONS.

ONE OF THE KEY ISSUES IS WHETHER OR NOT THE RESULTS REPORTING REQUIREMENT SHOULD BE EXPANDED TO INCLUDE TRIALS OF UNAPPROVED PRODUCTS.

ANOTHER KEY QUESTION WHETHER OR NOT THE RESULTS INFORMATION SHOULD BE ACCOMPANIED BY NARRATIVE SUMMARIES.

NARRATIVE SUMMARIES TARGETING TWO DIFFERENT AUDIENCES, TECHNICAL AUDIENCE AND MORE OF A LAY AUDIENCE.

BUT ONE OF THE QUESTIONS THAT WAS SPECIFICALLY ASKED IN CONJUNCTION WITH THIS QUESTION IS, CAN NARRATIVE SUMMARIES BE DONE WITHOUT BEING PROMOTIONAL AND MISLEADING.

SO THAT'S SOMETHING THAT WILL BE FURTHER ADDRESSED AS PART OF THE RULE MAKING.

THEN THERE'S SOME OTHER BASIC THINGS, ONE OF THEM IS RELATED TO THE FULL PROTOCOL AND WHETHER OR NOT THE FULL PROTOCOL SHOULD BE SUBMITTED AT THE TIME OF RESULTS REPORTING IN ORDER TO HELP EVALUATE THE RESULTS INFORMATION THAT WAS SUBMITTED.

THERE'S LOTS MORE TO COME FROM CLINICALTRIALS.GOV IN TERMS OF INFORMATION AND POTENTIAL CHANGES IN POLICY OVER TIME.

NOW I'M GOING TO DRILL DOWN A LITTLE BIT MORE CLOSELY AT THE RESULTS DATABASE I'VE BEEN TALKING ABOUT IT IN ABSTRACT I KNOW MAY BE DIFFICULT TO UNDERSTAND IF YOU HAVEN'T ACTUALLY SEEN IT YET.

BUT BEFORE I SHOW YOU SOME OF THE TABLES I JUST WANTED TO REITERATE SOME OF THE KEY POINTS THAT WE HAD TO CONSIDER IN BUILDING THE RESULTS DATABASE.

ONE OF THE KEY THINGS WAS THAT THE LAW WAS PASSED IN 2007 WE ACTUALLY HAD TO BUILD THE DATABASE ACCORDING TO THE SPECIFICATIONS IN THE LAW WITHIN ONE YEAR.

IT HAD TO BE AVAILABLE IN SEPTEMBER OF 2008.

SO OUR FIRST AND PRIMARY CONCERN WAS REALLY TO SATISFY THE LEGAL REQUIREMENTS ESTABLISHED IN THE LAW.

THEN AFTER THAT WE HAD OTHER GOALS AND THOSE WERE PROMOTE OBJECTIVE STANDARDIZED REPORTING, TO FACILITATE THE GOOD REPORTING PRACTICES THAT EXIST IN PUBLISHING AND OTHER REGULATORY GUIDELINES, CONSORT IS A GOOD WAY.

WE ALSO NEEDED TO PROVIDE A STRUCTURE DATA ENTRY MECHANISM TO ENSURE THAT PEOPLE WERE COMPLETELY RECORDING THE RESULTS OF THE TRIALS TO ALLOW FOR EFFICIENT REVIEW HERE AT MLN.

HAVE SAME INFORMATION IN THE SAME PLACE THAT NO MATTER WHAT STUDY RECORD YOU ARE LOOKING AT YOU'LL BE ABLE TO FIND THE SPECIFIC TYPE OF INFORMATION YOU'RE LOOKING FOR IN THE SAME PLACE.

THEN WE ALSO HAD TO SUPPORT DETAILED SEARCHES OF SPECIFIC DATA ELEMENTS AS WELL AS JUST BROAD SEARCHES.

BEYOND THAT AFTER THE INFORMATION IS SUBMITTED, WE HAVE STAFF THAT ACTUALLY LOOK AT THE INFORMATION THAT WAS SUBMITTED TO MAKE SURE THAT IT IS CLEAR AND INFORMATIVE AND WE'RE FOCUSING ON ENSURING THAT THE INFORMATION IS LOGICAL AND INTERNALLY CONSISTENT.

WE DID HAVE STUDY SUBMITTED WITH THAT OUTCOME MEASURE BUT THEY SUGGESTED THAT THE -- AVERAGE NUMBER OF HOURS ASLEEP PER DAY WAS 823.

SO THERE IS A ROLE TO HAVE INDIVIDUAL REVIEWERS JUST DOING FINAL CHECK BEFORE WE POST IT TO ENSURE THAT THE INFORMATION MEETS THESE BASIC CRITERIA OF MEANINGFUL AND APPARENTLY VALID.

THERE ARE MANY CASES IN WHICH WE WILL SEND THE RECORD BACK TO THE SUBMITTER -- REQUESTING CLARIFICATION OR UPDATING ON CERTAIN ISSUES.

BUT OUR REVIEW IS NOT PEER REVIEW.

WE'RE JUST LOOKING AT THESE FOUR BASIC BULLETS THAT YOU SEE ON THE SLIDE JUST WANT TO ENSURE THAT THE INFORMATION THAT'S AVAILABLE IS AT LEAST MINIMALLY UNDERSTANDABLE.

SO THAT SOMEONE ELSE COULD ASK THE HARD QUESTIONS ABOUT WHAT'S AVAILABLE IN THAT STUDY RECORD.

SO TO FIND RESULTS SUBMITTED TO CLINICAL TRIALS THIS IS WHAT WOULD YOU DO.

I'LL JUST SKIP THAT.

FROM THE HOME PAGE YOU CAN EASILY ACCESS THE ADVANCE SEARCH OPTION.

IF YOU LOOK TO THE RIGHT OF THAT IN THE CENTER YOU CAN ACTUALLY SEE SOME HELP ABOUT HOW TO FIND RESULTS OF STUDIES IF YOU NEEDED SOME ADDITIONAL HELP WITH THAT.

LET'S SAY WE ALREADY KNEW WE'RE GOING TO CLICK ON ADVANCED SEARCH.

THAT WILL TAKE YOU TO THE ADVANCED SEARCH FORM.

THEN YOU WILL SEE WE HAVE DIFFERENT FIELDS THAT YOU CAN SELECT TO THE FOCUS YOUR SEARCH AND ONE OF THE OPTIONS IS TO FOCUS ON STUDY RESULTS.

YOU CAN SELECT FROM THIS PULL-DOWN MENU STUDIES WITH RESULTS.

THEN I CONDUCTED MY SEARCH.

WHAT YOU CAN'T SEE ON THIS SCREEN HOW MANY RESULTS I ACTUALLY FOUND.

I CUT OFF PART THAT HAVE FOR PURPOSES OF ILLUSTRATION.

THEN YOU CAN SEE ON LEFT THAT ALL THESE TRIALS HAVE BEEN COMPLETED THEY ALL HAVE RESULTS.

YOU CAN GO AHEAD CLICK ON A RECORD THAT HAS RESULTS, WE PRESENT THE INFORMATION IN TABS, FULL TEXT VIEW THAT YOU SEE HERE IS THE PROTOCOL INFORMATION THAT WAS SUBMITTED AND REGISTERED AT THE TIME THAT THE STUDY WAS INITIATED AND UPDATED OVER TIME THROUGH THE LIFE CYCLE.

TRIAL.

THEN THERE'S ANOTHER TAB WHEN STUDY RESULTS ARE AVAILABLE THAT'S LABELED STUDY RESULTS.

IF YOU CLICK ON THAT TAB GET TO THE PAGE THAT INCLUDES MORE INFORMATION ABOUT THE RESULTS.

WE DO RESTATE SOME OF THE BASIC INFORMATION FROM THE PROTOCOL VIEW FROM THAT FULL TEXT VIEW ON THIS SCREEN JUST TO REINFORCE SOME OF THE BASIC STUDY DESIGN INFORMATION IF SOMEONE WAS JUST GOING DIRECTLY TO THE RESULTS INFORMATION.

BUT WE CONSIDERED THIS TO BE ONE COMPREHENSIVE RECORD IN WHICH STUDY RESULTS ARE BEST UNDERSTOOD IN THE CONTEXT OF THE PROTOCOL INFORMATION.

SO LOOKING AT BOTH TABS WOULD BE REALLY IMPORTANT FOR UNDERSTANDING THE STUDY RESULTS.

SO THERE'S MANY TRIALS IN THE DATABASE THAT DO NOT HAVE RESULTS, I MENTIONED EARLIER WE HAVE OVER 14,000 STUDIES.

ONLY -- 14,000.

THERE ARE MANY -- 134, STUDY.

FIRST AND FOREMOST STUDY MIGHT STILL BE ONGOING THEY DON'T HAVE RESULTS TO SUBMIT YET.

THE STUDY MAY NOT ACTUALLY BE SUBJECT TO THE LAW, SAY IT WAS COMPLETED BEFORE 2007.

IT WOULD NOT BE REQUIRED TO SUBMIT RESULTS.

MAYBE STUDY IS COMPLETED BUT DEADLINE HAS NOT YET BEEN REACHED FOR WHEN RESULTS SUBMISSION OCCURS.

SOMEONE SUBMITS RESULTS WHEN THEY GET POSTED BECAUSE THAT HAVE REVIEW PROCESS.

OR THEY MAY MAKE CORRECTIONS IN RESPONSE.

THERE ARE POTENTIAL MECHANISMS FOR DELAYING RESULTS SUBMISSION SO THEY MAY HAVE ACTUALLY APPLIED FOR ONE OF THE DELAYS OF RESULTS SUBMISSION.

WHAT DOES A RESULTS RECORD LOOK AT.

WE'VE BEEN WONDERING NOW.

THIS IS JUST SAMPLE RECORD THAT WE'VE ADAPTED FOR PURPOSES OF ILLUSTRATION HERE TO MAKE SURE THAT THE TABLES ARE CLEAR.

YOU'VE ALREADY SEEN THIS, STUDY RESULTS TAB FOR THIS PARTICULAR STUDY.

THEN FIRST SCIENTIFIC MODULE WAS PARTICIPANT FLOW.

WHAT PARTICIPANT FLOW IS, SIMILAR TO CONSORT FLOW DIAGRAM WHERE YOU ARE SHOWING THE PROGRESS OF PARTICIPANTS THROUGH THE TRIAL.

WHAT'S REQUIRED TO BE REPORTED IS THE NUMBER THAT STARTED AND NUMBER THAT COMPLETED PER ARM OF THE TRIAL.

WE HAVE TRANSLATED THAT CONSORT FLOW DIAGRAM IN TO TABULAR REPRESENTATION OF THAT INFORMATION.

YOU CAN CLEARLY SEE HERE THE NUMBER OF PEOPLE THAT STARTED AND COMPLETED IN EACH ARM.

AND YOU CAN ALSO SEE NUMBER THAT DID NOT COMPLETE AND REASONS FOR NONCOMPLETION.

WE ALSO HAVE AVAILABLE MORE DETAILED DESCRIPTIONS OF THE ARMS THAT YOU SEE REPORTED HERE, THE COLUMNS.

BUT THESE ARE TITLE, IS THAT ARE USED FOR CONVENIENCE AND ABOVE THE TABLE YOU'D HAVE THE FULL DEFINITION OF WHAT PARTICIPANTS WERE ADMINISTERED, WHO PARTICIPATED IN EACH OF THESE ARMS.

YOU HAVE A MORE DETAILED EXPLANATION.

THAT'S THE PARTICIPANT FLOW, NUMBER THAT STARTED AND COMPLETED.

THEN NEXT MODULE BASED ON CHARACTERISTICS.

THIS IS TYPICALLY WHAT YOU'LL SEE AS TABLE ONE IN A JOURNAL ARTICLE.

YOU CAN SEE THAT THE INFORMATION IS VERY SIMILAR TO THE PREVIOUS TABLE THAT WE HAVE THE TWO ARMS OF THE STUDY.

WE HAVE THE NUMBER OF PARTICIPANTS THAT WERE ANALYZED IN EACH OF THESE ARMS OF THE STUDY.

UNFORTUNATELY I HAVE A TYPO IN THIS SLIDE WHICH I'LL JUST ACKNOWLEDGE, THE TOTAL NUMBER OF PARTICIPANTS IS INCORRECT THAT SHOULD BE DOUBLE THE NUMBER THAT YOU SEE THERE RIGHT NOW.

WE REQUIRE THAT AGE AND GENDER BE SUBMITTED.

THAT ARE UNIVERSAL TO ALL CLINICAL TRIALS.

THE OTHER TYPES OF BASELINE MEASURES THAT MAY BE USEFUL FOR EVALUATING WILL VARY.

BUT WE MAKE IT EASY TO SUBMIT AS MANY STUDY SPECIFIC MEASURES AS THEY FEEL ARE APPROPRIATE FOR COMMUNICATING.

HERE YOU SEE REQUIRED ONES AGE AND GENDER.

THEN NEXT SLIDE YOU CAN SEE SOME OF THE STUDY SPECIFIC MEASURES THAT WERE SUBMITTED BY THIS SPONSOR.

SO THAT IS FIRST TWO MODULES.

PARTICIPANT FLOW AND BASELINE.

THEN THIRD MODEL IS OUTCOME MEASURES.

PRIMARY AND SECONDARY OUTCOME MEASURES THAT WERE SUBMITTED AS PART OF THE REGISTRATION BE REPORTED IN THE RESULTS DATABASE.

I'M JUST SHOWING HERE AN EXAMPLE OF A PRIMARY OUTCOME MEASURE.

THIS WAS STUDY ON BREAST CAN IS HE WERE EVALUATING WHETHER OR NOT THE PARTICIPANT HAD RELAPSE OR IF THEY DIED FROM ANY CAUSE.

OUTCOME MEASURE ENDED UP BEING NUMBER OF PARTICIPANTS WHO EXPERIENCED THAT EVENT IN EACH OF THE COLUMNS.

IT'S POSSIBLE TO REPORT ANY NUMBER OF PRIMARY AND SECONDARY OR OTHER PRESPECIFIED OUTCOME MEASURES WITHIN THE RESULTS DATABASE.

THEN FINAL MODEL WE'VE HAD, IS ADVERSE EVENTS.

LAW REQUIRES THAT ALL SERIOUS ADVERSE EVENTS BE REPORTED BY SYSTEM ORGAN CLASS AND PER ARM OF THE TRIAL.

YOU'LL SEE THE TABLE GENERALLY FAMILIAR TO THE OTHER TABLES, THERE'S TWO ARMS OF INFORMATION FROM THE STUDY YOU CAN SEE TOTAL NUMBER OF SERIOUS ADVERSE EVENTS IN EACH ARM AS WELL AS INDIVIDUAL ADVERSE EVENT TERMS THAT OCCURRED WITHIN THIS PARTICULAR SYSTEM ORGAN CLASS.

THERE WERE MORE SERIOUS ONES THAN I COULD FIT.

IN ADDITION TO THE SERIOUS ADVERSE EVENT TABLE A SECOND TABLE MUCH OTHER NOT SERIOUS ADVERSE EVENTS IS REQUIRED TO BE SUBMITTED.

I DID NOT INCLUDE A SLIDE ILLUSTRATING THAT.

I HAVE INCLUDED SOME PUBLICATIONS YOU MAY BE INTERESTED IN FOR GETTING INFORMATION.

THOSE ARE ALL ILLUSTRATED HERE.

I'VE ALSO INCLUDED WHERE YOU CAN EASILY FIND THEM ON OUR WEBSITE.

IF YOU EVER HAVE ANY QUESTIONS ABOUT CLINICAL TRIALS WEBSITE WE HAVE SOURCE INFORMATION.

BE HAPPY TO ANSWER ANY QUESTIONS THAT WE CAN.

WITH THAT -- THE TALK SECTION OF THIS, I'D BE HAPPY TO TAKE ANY QUESTIONS THAT PEOPLE MAY HAVE ABOUT CLINICALTRIALS.GOV.

>> ARE THERE REALLY NO QUESTIONS?

TERMINATED STUDIES VERSUS COMPLETED STUDIES IF YOU WANT TO MAYBE TYPE A LITTLE BIT MORE ABOUT YOUR QUESTIONS I CAN TRY TO ADDRESS IT GENERALLY AS YOU'RE TALKING IF -- AS YOU'RE TYPING.

IF THAT WOULD BE HELPFUL.

THE QUESTION IS MORE ABOUT IF YOU HAVE TERMINATED STUDY DO THOSE RESULTS GET POSTED.

ONE OF THE INTERESTING THINGS ABOUT THE LAW WAS THAT THE WAY THAT THEY DEFINED THE COMPLETION DATE WHICH IS ALSO WHAT ULTIMATELY DETERMINES WHEN RESULTS ARE REQUIRED TO BE REPORTED THE WAY THAT THEY DEFINE COMPLETION DATE WAS EITHER THE DATE THAT FINAL DATA COLLECTION OCCURRED FOR THE PRIMARY OUTCOME MEASURE OR DATE THAT THE STUDY WAS TERMINATED.

IT DEPENDS ON THE SITUATION.

THERE MAY BE CASES WHERE A STUDY NEVER ENROLLED ANY PARTICIPANTS.

IF THAT IS THE CASE THEN THAT STUDY SHOULD ACTUALLY BE GIVEN A STATUS OF WITHDRAWN NOT TERMINATED.

THAT MEANS THAT THERE WERE NO PARTICIPANTS ENROLLED AND STUDY WAS ENDED.

THERE'S THAT STATUS WITHDRAWN.

BUT MANY REASONS THAT STUDY MAY BE TERMINATED, COULD BE THAT IT WAS TOO DIFFICULT TO ENROLL PARTICIPANTS SO THERE WERE ONLY FEW NUMBER OF PARTICIPANTS IN THE TRIAL.

THE STUDY WAS TERMINATED INCLUDED SMALL NUMBERS OF PARTICIPANTS RESULTS ARE PROVIDED NUMBER OF STARTED-COMPLETED, BASELINE CHARACTERISTICS, EVEN BASIC COUNT OF THE PEOPLE WHO HAD BASIC RESPONSES AND ADVERSE EVENTS ARE PROVIDED AS WELL.

THERE ARE SOME CASES WHERE PEOPLE DO NOT HAVE THE DATA FOR STUDIES WITH SMALL NUMBERS OF PARTICIPANTS THEY HAVEN'T ACTUALLY ANALYZED IT THEY ARE REPORTING THAT ZERO PARTICIPANTS WERE ANALYZED FOR OUTCOME MEASURES.

YOU MAY HAVE CASE WHERE SOME RESULTS ARE REPORTED BUT NOT ALL.

SOMETIMES STUDIES MIGHT BE TERMINATED FOR EFFICACY REASONS FOR SAFETY REASONS, THEY DID HAVE ENOUGH PEOPLE ENROLLED BUT JUST TERMINATED EARLY DUE TO THE FINDINGS.

YOU CAN CLEARLY MAKE PUBLIC HEALTH ARGUMENT THAT THOSE ARE VERY IMPORTANT FINDINGS.

ISN'T ANY REASON TO THINK THEY WOULD BE ACCEPTED.

THEY WOULD NOT BE REQUIRED TO BE SUBMITTED BY THE LAW.

I THINK THAT'S VERY LONG ANSWER TO YOUR QUESTION.

QUESTION FROM ANDY, IS THERE ANY INDICATION ON REGISTERED STUDIES AS TO WHETHER RESULTS ARE REQUIRED FOR THOSE STUDIES.

THAT'S A GOOD QUESTION.

I KIND OF DESCRIBE SOME OF THE KEY CHARACTERISTICS OF A TRIAL IN TERMS OF WHETHER OR NOT IT WOULD BE CONSIDERED APPLICABLE CLINICAL TRIAL UNDER THE LAW BUT THOSE ARE NOT EXPLICIT TAGGED RIGHT NOW BEING APPLICABLE TRIAL AND REQUIRING RESULTS RIGHT NOW.

WE SOMETIMES DO REFER THOSE TO FDA WHO HAS PRIMARY ENFORCEMENT AUTHORITY.

IF IT LOOK LIKE MAYBE SOMEONE HASN'T DONE THEIR JOB ACCORDING TO THE LAW.

>> ALL RIGHT, EVERYONE.

THANK YOU SO MUCH.

WE WANT TO THANK DR. WILLIAMS FOR THE EXCELLENT PRESENTATION AND OVERVIEW OF CLINICALTRIALS.GOV.

ONE OF THE THINGS THAT NLM IS INTERESTED IN DOING AND ONE OF THE REASON WHY WE DID THIS PRESENTATION TODAY IS HAVING US AS LIBRARIANS DO A LITTLE BIT BETTER JOB OF PROMOTING CLINICALTRIALS.GOV, IF YOU REMEMBER BACK RIGHT NOW WE'RE CONSIDERED AT THE LOW END OF PEOPLE WHO ARE UTILIZING THE DATABASE, NLM HOPEFUL THAT LIBRARIANS WILL ADVOCATE AND PROMOTE THIS DATABASE AS A RESOURCE ON MANY LEVELS.

THANK YOU AGAIN, DR. WILLIAMS.

WE ARE GOING TO GIVE YOU ALL NOW SERIES OF POLL QUESTIONS TO KIND OF SUMMARIZE AND WRAP UP TODAY'S PRESENTATION.

THE FIRST ONE YOU'RE GOING TO HAVE TO THINK BACK TO THE BEGINNING HAS TO DO WITH LEGISLATION WHICH MANDATED RESULTS REPORTING AS A PART OF CLINICALTRIALS.GOV.

ALL RIGHT, YES, INDEED.

YOU ALL ARE CORRECT.

DR. WILLIAMS TALKED ABOUT IT AS -- I CAN'T SAY THE ACRONYM BUT IT IS IN FACT THE FOOD AND DRUG ADMINISTRATION AMENDMENTS ACT OF 2007, FDAAA THAT IS HOW IT IS AFFECTIONALLY TERMED.

GREAT JOB.

WE'LL BRING UP THE SECOND ONE.

THIS POLL IS NUMBER TWO.

SOME POSSIBLE REASONS TO REGISTER CLINICAL TRIALS AND REPORT THE RESULTS.

MAKE SURE YOU READ COMPLETELY ALL THE WAY DOWN TO THE BOTTOM OF THE QUESTION.

YES.

THE ANSWER ACTUALLY HERE REFERRING BACK TO THE PRESENTATION IS ALL OF THE ABOVE.

THESE REASONS DO INCLUDE IDENTIFICATION OF POTENTIAL PARTICIPANTS, INCREASED TRANSPARENCY OF THE RESEARCH ENTERPRISE TO ALLOW FOR MORE COMPLETE IDENTIFICATION OF RELEVANT STUDIES AND FINAL ONE OF COURSE HAVING TO DO WITH FUNDING AND ALLOCATION OF RESOURCES.

THE ANSWER IS ACTUALLY, ALL OF THE ABOVE.

WE'LL CLOSE THAT ONE OUT.

I GAVE YOU A LITTLE HINT FOR THIS NEXT ONE.

QUESTION NUMBER THREE HAS TO DO WITH CURRENTLY AS OF THE MOST RECENT INFORMATION DATABASE WHO IS THE HIGHEST NUMBER OF VISITORS TO CLINICAL CLINICALTRIALS.GOV.

EXCELLENT.

YES.

OKAY, SORRY.

MAKE SURE I'M AUDIBLE.

THE PATIENTS ARE THE HIGHEST NUMBER CURRENTLY TO CLIP CLINICALTRIALS.GOV, FOLLOWED BY RESEARCHERS AND OTHER GROUPS.

AGAIN LIBRARIANS BEING AT THE VERY BOTTOM.

GOING TO CLOSE THAT POLL OUT.

FINAL CONTENT POLL QUESTION HAS TO DO WITH POSSIBLE REASONS WHY RESULTS MAY NOT BE POSTED OR PERHAPS BETTER WORDING IS POSTED YET.

AGAIN, THE ANSWER FOR THIS ONE IS THE FINAL ANSWER, ALL OF THE ABOVE.

ALL OF THESE WERE REASONS THAT DR. WILLIAMS MENTIONED AS BEING POSSIBLE REASONS WHY THE RESULTS ARE NOT YET BEING SHOWN IN A STUDY FOR CLINICALTRIALS.GOV.

VERY GOOD.

GREAT RESPONSES.

AND THE FINAL POLL AGAIN TO HELP US UNDERSTAND MORE FULLY WHO IS ACTUALLY LISTENING IN TODAY REGARDING HOW MANY PEOPLE ARE VIEWING THE PRESENTATION WITH YOU TODAY.

YOU CAN SELECT THE APPROPRIATE RESPONSE THERE.

WE KNOW AT LEAST A FEW OF YOU DO THIS IN A ROOM WITH MANY OF YOU THERE.

ALL RIGHT.

THANK YOU VERY MUCH.

I'M GOING TO LET EMILY CLOSE THAT OUT WHEN WE'RE READY.

WE ARE DRAWING NEAR TO THE END OF OUR HOUR THIS MORNING.

I WANT TO REMIND YOU THAT NEXT MONTH'S PRESENTATION WILL BE BACK ON OUR NORMAL SCHEDULE ON THE THIRD WEDNESDAY OF THE MONTH, WHICH WILL BE JANUARY 16 OF 2013.

AND THAT IS THE THIRD WEDNESDAY.

THIS MLA CE WILL BE AVAILABLE UP UNTIL JANUARY 8.

AND JUST AS YOU REMINDER THAT YOU SEE THERE NEXT MONTH'S TOPIC IS GOING TO BE ON NUTRITION INFORMATION RESOURCES.

I WILL BE DOING THAT PRESENTATION FOR US AS A TEASER AND PRELUDE TO A BRAND NEW COURSE THAT WE'RE GOING TO BE ROLLING OUT FOR THE REGION EARLY IN 2013 ON NUTRITION RESOURCE.

IF YOU HAVE ANY FINAL QUESTIONS YOU MAY POP THOSE IN THE CHAT BOX, DR. WILLIAMS IS STILL I BELIEVE ON THE CALL.

WE WANT TO REMIND YOU THAT THIS PRESENTATION WILL BE ARCHIVED, THANK YOU SO MUCH FOR BEING A PART OF SCR CONNECTIONS TODAY.

WISH EVERYONE FROM OUR OFFICE TO EACH OF YOU A VERY HAPPY WARM HOLIDAY SEASON.

FROM ALL OF US HERE.

THANK YOU SO MUCH.

HAPPY HOLIDAYS.